
INCIDENT COMMAND SYSTEM

NATIONAL TRAINING CURRICULUM

AIR OPERATIONS

MODULE 10

I-300



**INSTRUCTOR
GUIDE
OCTOBER 1994**

NFES 2457



CERTIFICATION STATEMENT

on behalf of the

NATIONAL WILDFIRE COORDINATING GROUP

The following training material attains the standards prescribed for courses developed under the interagency curriculum established and coordinated by the National Wildfire Coordinating Group. The instruction is certified for interagency use and is known as:

Air Operations

Member NWCG and Training Working Team Liaison

Chair, Training Working Team

Date 11/7/94

Date 10/24/94

Description of the Performance Based System

The Wildland Fire Qualifications System is a “performance based” qualifications system. In this system, the primary criteria for qualification is individual performance as observed by an evaluator using approved standards. This system differs from previous wildland fire qualifications systems which have been “training based.” Training based systems use the completion of training courses or a passing score on an examination as a primary criteria for qualification.

A performance based system has two advantages over a training based system:

- Qualification is based upon real performance, as measured on the job, versus perceived performance, as measured by an examination or classroom activities.
- Personnel who have learned skills from sources outside wildfire suppression, such as agency specific training programs or training and work in prescribed fire, structural fire, law enforcement, search and rescue, etc., may not be required to complete specific courses in order to qualify in a wildfire position.

1. The components of the wildland fire qualifications system are as follows:

- a. Position Task Books (PTB) contain all critical tasks which are required to perform the job. PTB's have been designed in a format which will allow documentation of a trainee's ability to perform each task. Successful completion of all tasks required of the position, as determined by an evaluator, will be the basis for recommending certification.

IMPORTANT NOTE: Training requirements include completion of all required training courses prior to obtaining a PTB. Use of the suggested training courses or job aids is recommended to prepare the employee to perform in the position.

- b. Training courses and job aids provide the specific skills and knowledge required to perform tasks as prescribed in the PTB.
- c. Agency Certification is issued in the form of an incident qualification card certifying that the individual is qualified to perform in a specified position.

2. Responsibilities

The local office is responsible for selecting trainees, proper use of task books, and certification of trainees, see the Task Book Administrators Guide 330-1 for further information.

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Boise, Idaho 83705**

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PREFACE

This module is one of seventeen modules which comprise the Incident Command System (ICS) National Training Curriculum. The entire curriculum has been developed by an interagency steering group and a contract consultant. The curriculum was sponsored by the National Wildfire Coordinating Group, and development was directed and supported by the National Interagency Fire Center, Division of Training. The Steering Group was represented by several application areas (Search & Rescue, Law Enforcement, Structural Fire, Wildfire, etc.) which guided the work of the contractor in the development of this package.

The Steering Group was:

David P. Anderson - USDA, Forest Service
Mike Colgan - Orange County Fire Department
Dave Engle - USDI, Bureau of Land Management
Dan Francis - California Department of Forestry
Ken Mallette - New Jersey State Police
Mike Munkres - USDI, Bureau of Land Management
Gary Nelson - Los Angeles County Fire Department
Bill Vargas - State of New Mexico Department of Public Safety

The Contract Consultant was:

The Terence Haney Company
Woodland Hills, California

<p>IT IS ESSENTIAL THAT INSTRUCTORS OF THIS MODULE READ THE INFORMATION CONTAINED IN THE INSTRUCTOR CURRICULUM GUIDE AND MEET THE QUALIFICATIONS DESCRIBED THEREIN.</p>
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Detailed Lesson Outline

COURSE:	Module 10 - Air Operations
SUGGESTED TIME:	4 Hours
TRAINING AIDS:	Overhead projector, overhead pens, reference text
SUBJECT:	This module describes the role of the Air Operations Branch and how to set up an effective aviation organization to support incidents. (This module may not be applicable for some user groups.)
OBJECTIVES:	<ol style="list-style-type: none">1. Describe the function and general duties associated with each element of the Air Operations Branch organization.2. Diagram a full Air Operations Branch organization using a simulated scenario.3. Describe the function and use of the ICS Form 220, Air Operations Summary Worksheet.

OUTLINE	AIDS & CUES
<p>THERE ARE TWO OPTIONS AVAILABLE FOR PRESENTATION OF THIS MODULE'S MATERIAL.</p> <ol style="list-style-type: none"> 1. HAVE STUDENTS READ THE MATERIAL AND COME TO CLASS PREPARED TO DISCUSS THE MATERIAL USING THE TOPICS LISTED ON PAGE 10-3 OF THE INSTRUCTOR GUIDE. 2. THE CLASSROOM INSTRUCTIONAL METHOD. <p>THE DETERMINATION OF WHICH IS THE BEST APPROACH WILL BE INFLUENCED BY WHETHER THE STUDENTS TAKING THIS MODULE ARE:</p> <ol style="list-style-type: none"> 1. PERSONNEL WHO WILL BE FUNCTIONING WITHIN THE AIR OPERATIONS BRANCH. (USE THE PRE-COURSE STUDY AND CLASS REVIEW METHOD.) 2. PERSONNEL WHO WILL BE OUTSIDE OF THE AIR OPERATIONS BRANCH BUT NEED TO HAVE SOME KNOWLEDGE OF AIR OPERATIONS. (USE CLASSROOM PRESENTATION - LIMIT POSITION DESCRIPTIONS AS APPROPRIATE.) <p>AN OPTIONAL EXERCISE HAS BEEN PREPARED FOR THE MODULE, AND THE BACKGROUND FOR IT HAS BEEN INCLUDED AS PART OF THE INSTRUCTOR'S MATERIAL. THE EXERCISE, IF USED, SHOULD BE FOR STUDENTS WHO WILL FUNCTION WITHIN THE AIR OPERATIONS ORGANIZATION.</p> <p>FOR THE PRE-COURSE STUDY GROUP'S CLASS REVIEW, YOU WILL:</p> <ol style="list-style-type: none"> 1. REVIEW THE INSTRUCTIONAL MATERIAL USING THE TOPICS ON PAGE 10-3 OF INSTRUCTOR GUIDE. 	

OUTLINE	AIDS & CUES
<ol style="list-style-type: none"> 2. HAVE STUDENTS PARTICIPATE IN THE OPTIONAL SMALL GROUP EXERCISE. THE EXERCISE IS DESCRIBED ON PAGE 10-4 OF THE INSTRUCTOR GUIDE. 3. HAVE STUDENTS COMPLETE THE MODULE TEST. <p>TOPICS FOR INSTRUCTOR TO USE DURING CLASSROOM REVIEW OF MODULE MATERIAL:</p> <ol style="list-style-type: none"> 1. Have students give examples from their experiences of different ways aircraft are used on incidents. List on board, and compare against list in module materials. 2. Discuss the major reasons for establishing a separate Air Operations Branch at an incident. See list in module materials. 3. Diagram the Air Operations Organization. You can do this using an open framework on a board, and have students fill in the spaces. Note the reporting relationships especially in the Air Support Group. 4. Review and discuss the primary responsibilities for each of the air operations positions shown on the organization chart. 5. Discuss the use of Temporary Flight Restrictions, cover what they are, why they are used, how they are put into place, and who does it. 6. Show and discuss the ICS Form 220, Air Operations Summary. Discuss its purpose, contents, how it is used and who does it. <p>(When using the ICS Form 220, it would be best to have at least a partially complete form ready. It is important that the contents of the sample form be appropriate to the students' background.</p>	

OUTLINE	AIDS & CUES
<ol style="list-style-type: none"> 7. Discuss the role of a helibase and helispots at an incident. Make sure the students know the differences between them. Cover the factors that must be considered. See lists in the module materials. 8. Discuss various uses for incident assigned aircraft other than for primary tactical or logistical support. See examples in module materials. 9. Review the role and duties of: <ul style="list-style-type: none"> Air Tactical Group Supervisor Air Support Group Supervisor <p>Discuss (as appropriate to the students' agencies) where these positions would function during an incident.</p> 10. As appropriate, review roles and responsibilities of the Helibase Manager and Helispot Managers. 11. Review and discuss other positions as needed or as time is available. 	
<p style="text-align: center;">Module 10 Exercise</p> <p>An optional management exercise related to the instructional material in Module 10 on Air Operations. The exercise should take approximately 1 hour.</p> <p>The exercise objective relates to the following instructional Objective:</p> <p>Diagram a full Air Operations Branch organization using a simulated scenario.</p> <p>During the exercise, small groups of students will be asked to make an initial determination regarding an appropriate Air Operations organization for a simulated incident.</p>	

OUTLINE	AIDS & CUES
<p>Emphasize to the students that this is not a tactical problem solving exercise. It deals strictly with establishing an initial appropriate management structure.</p> <p>All groups will be using the same scenario. At the completion of their work, they will reconvene and provide their organizations and give the rationale for the decisions they have made.</p>	

MODULE 10 AIR OPERATIONS

Exercise Scenario:

This incident occurs on a Sunday afternoon. A twin engine aircraft with eight passengers is overdue on a flight from _____ to _____. On board is the Governor of _____, his wife, the Japanese consulate representative and his wife, and the Governor's daughter who is five months pregnant and her husband. The plane had a crew of two.

Last contact with the aircraft was at 1400 hours this date, over The Wenatchee, a 26,000 square mile mostly wilderness area in the northern part of the state. The pilot was obtaining weather information at the time of the last contact, and gave no indication of any problems. So far, there has been no emergency signal from the aircraft. Rain and high winds have precluded any search attempt until Monday.

You were notified at 1600 on Sunday, that you were to be a part of an ICS management team being assembled for this incident. You will be the Air Operations Branch Director.

You are to report to the Bigelow Municipal Airport which is on the southwest edge of the Wenatchee area. The Bigelow Airport will be the Base and Incident Command Post.

The airport has a 5000-ft. runway and plenty of parking for other aircraft. Limited fueling and mechanical services are available. It will accommodate a C-130. In addition to Bigelow, there are two other smaller airstrips in the Wenatchee. Both are 3500-ft. dirt strips with no services.

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When advised of your assignment, you were told that a state national guard C-130 is available for use. The national guard, and the Civil Air Patrol have been notified.

Three helicopters and three other fixed-wings, all from different agencies, are being readied for the search. Ground search teams are also being assembled.

The Japanese Embassy in Washington has been notified and has requested to help in any way possible.

The first planning meeting will be at 0300 hours on Monday at the Bigelow ICP. You are scheduled to arrive at 0200 hours with other members of the team. You have been advised that the initial search activity will be conducted from the air using all available aircraft.

Weather in the area is in the 40s during the night with occasional rain showers. A high pressure area is scheduled to move across the area within the next 24 hours. Weather for tomorrow should be clear.

Exercise Requirement:

Based on the above information, you are to:

1. Be prepared to state your recommendation for an Air Operations organization adequate to initially support this incident. It should include all organizational positions, facilities, and support services that may be needed.
2. Be prepared to provide recommendations to the Operations Section Chief on what additional aviation equipment and personnel resources may be useful or necessary. It is recognized that some of this may not be fully known until the overall plan is developed.

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Additional Background

Prior to the exercise you should determine the kinds (and types) of fixed-wing and helicopter aircraft to be available.

Helicopters	Fixed-wing
_____	_____
_____	_____
_____	_____

In addition, depending upon the agencies involved, the students may require some additional information as necessary for making their decisions. These could include:

- Airspace jurisdiction - Federal, state, private, a mix, etc.
- Ownership and certification of available aircraft for use.
- Ground rules regarding incident responsibilities for fueling, etc.
- Who has responsibility for Medivac?
- Whose standards are to be followed for qualifications, fiscal arrangements, maintenance, etc.

You should be prepared to provide some level of background information on these items if necessary.

